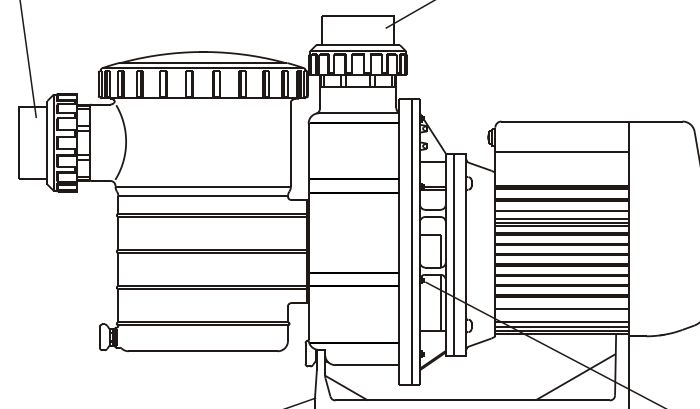


SUCTION PORT FROM POOL
OR VACUUM FILTER

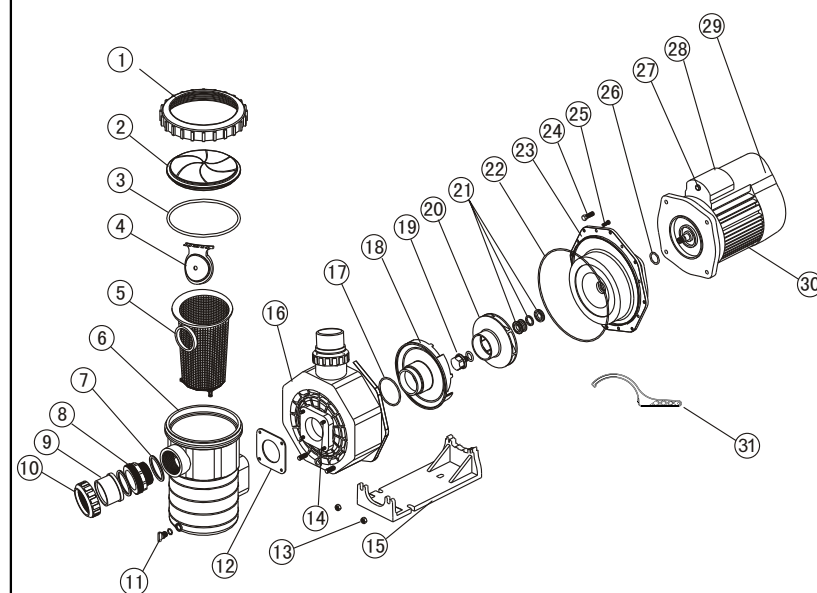
DISCHARGE PORT TO
FILTER OR POOL



PUMP MAY BE BOLTED TO LEVER
FOUNDATION OR MOUNTING BRACKET

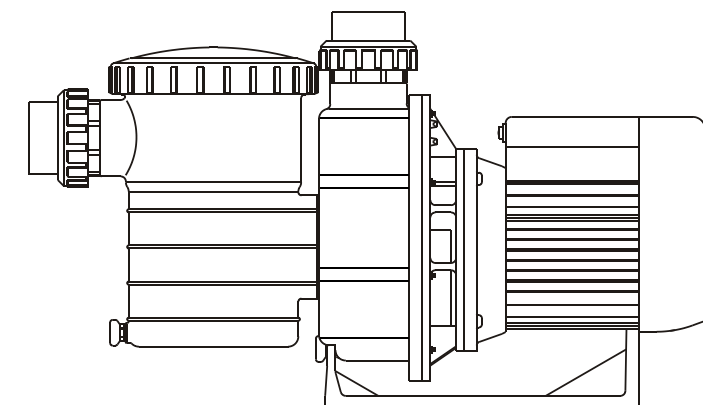
STAINING SCREWS
OF PUMP BODY

PARTS OF PUMP



Key NO.	Description	Qty	Part No
1	Lid lock ring	1	CP-01-02
2	Lid	1	CP-01-03
3	O'ring	1	CP-01W-01
4	Stop back valve	1	CP-01-12
5	Basket	1	CP-01-04
6	Hair with lint pot	1	CP-01-05
7	O'ring bulkhead	4	CP-01W-04
8	Bulkhead fitting	2	MPV-02-005
9	Adaptor bulkhead	2	MPV-02-007
10	Nut bulkhead	2	MPV-02-006
11	Drain plug with o'ring	1	CP-01-013 CP-01W-05
12	Gasket	1	CP-01W-06
13	Nut	2	CP-02W-03-2
14	Screw	4	CP-01W-08
15	1HP,1.5HP 2HP,3HP Base	1	CP-01-06-2 CP-01-06-1
16	Pump body	1	CP-01-07
17	O'ring	1	CP-01W-10
18	Diffuser	1	CP-01-08
19	Screw with o'ring	1	CP-01-10 CP-01W-05
20	Impeller	1	CP-01-09
21	Shaft seal	1	CP-01W-13
22	O'ring	1	CP-01W-14
23	Flange	1	CP-01-11
24	Screw	4	CP-01W-16
25	Screw	16	CP-01W-17
26	1HP,1.5HP 2HP,3HP O'ring	1	CP-01W-18-1 CP-01W-18-2
27	Over load switch	1	CP-01W-19
28	Irdome	1	CP-01-14
29	1HP,1.5HP 2HP, 3HP Cover	1	CP-01-13-2 CP-01-13-1
30	Motor	1	CP-01W-31
31	Opening key	1	CP-01-00

SB Series Centrifugal Pump Installation & Operating Instructions



INSTALLATION

Only qualified, licensed personnel should install pump and wiring.

IMPORTANT ELECTRICAL

Electrical Contractors Please Note: All 220 volt 50 Hz pumps must be wired to the main power supply through an approved and correctly rated contactor.

Pump Mount Must:

- ❖ Be solid Level Rigid Vibration Free.
- ❖ Allow pump suction inlet height to be as close to water level as possible.
- ❖ Allow use of short, direct suction pipe (To reduce friction losses.)
- ❖ Allow for gate valves in suction and discharge piping.
- ❖ Have adequate floor drainage to prevent flooding.
- ❖ Be protected from excess moisture.
- ❖ All adequate access for servicing pump and piping.

NOTICE:

Pump suction and discharge connections have moulded in thread stops, **DO NOT** try to screw pipe in beyond these stops.

OPERATION



▲ **NEVER** run pump dry! Running pump dry may damage seals, causing leakage and flooding! Fill pump with water before starting motor.

▲ Before removing lid:

STOP PUMP before proceeding.

CLOSE GATE VALVES in suction and discharge pipes.

RELEASE ALL PRESSURE from pump and piping system.

NEVER tighten or loosen screws while pump is operation.

▲ Do not block pump suction! To do so with body may cause severe or fatal injury. Children using pool must **ALWAYS** have close adult Supervision!

Priming Pump:

- ❖ Release all air from filter and piping system: see filter owner manual.
- ❖ In a flooded suction system (water source higher than pump), pump will prime itself when suction and discharge valves are opened.
- ❖ If pump is not in a flooded suction system, unscrew and remove trap cover; fill trap and pump with water.
- ❖ Clean and inspect Ring; re-install on trap cover.
- ❖ Replace trap cover on trap; turn clockwise to tighten cover.

NOTICE: Tighten trap cover by hand only.

Pump should prime now. Priming time will depend on vertical length of suction lift and horizontal length of suction piping.

Routine Maintenance

The only routine maintenance needed is inspection/cleaning of trap basket. Debris or trash that collects in basket, will choke off water flow through the pump. Follow instructions below to clean trap:

1. Stop pump, close gate valve in suction and discharge, and release all pressure from system before proceeding.
2. Unscrew trap lid (turn counterclockwise).
3. Remove strainer basket and clean. Be sure all holes in basket are clear, flush basket with water and replace in trap with large opening at pipe connection port (between ribs provided). If basket is replaced backwards cover will not fit on trap body.
4. Clean and inspect lid Ring; reinstall on trap cover.
5. Clean Ring groove on trap body and Replace lid. To help keep lid from sticking, tighten hand tight only.
6. Prime pump (see priming instructions above)

SERVICE & REPAIR PARTS

Refer all service to your local agent or dealer as his knowledge of your equipment makes him the vest qualified source of information. Order all repair parts through your dealer. Give the following information when ordering repair parts:

1. Unit nameplate data or serial number on label.
2. Description of part.

TROUBLE SHOOTING

MOTOR DOES NOT START

1. Disconnect switch or circuit breaker in off position
2. Fuses blown or thermal overload open
3. Locked motor shaft
4. Motor windings burned out
5. Defective starting switch inside singl phase motor
6. Disconnected or defective wiring
7. Low voltage

PUMP DOES NOT REACH FULL SPEED

1. Low voltage
2. Pump connected for wrong voltage

MOTOR OVERHEATS (protector trips)

1. Low voltage
2. Motor windings connected for wrong voltage on dual voltage model
3. Inadequate ventilation

PUMP DELIVERS NO WATER

1. Pump is not primed
2. Closed valve in suction or discharge line
3. Leakage or air into suction system
4. Impeller clogged

LEAKAGE OF WATER AT SHAFT

1. Shaft seal requires replacement

LOW PUMP CAPACITY

1. Valve in suction or discharge line partly closed
2. Suction or discharge line partly plugged
3. Suction or discharge line too small
4. Plugged basket in skimmer or hair and lint strainer
5. Dirty filter
6. Impeller clogged

HIGH PUMP PRESSURE

1. Discharge valve or inlet fittings closed too much
2. Return lines too small
3. Dirty filters

NOISY PUMP AND MOTOR

1. Plugged basket in skimmer or hair in lint strainer
2. Worn motor bearings
3. Valve in suction line partly closed
4. Suction line partly plugged
5. Vacuum hose plugged or too small
6. Pump not supported properly

AIR BUBBLES AT INLET FITTINGS

1. Leakage of air into suction line at connections or valve stem
2. Cover gasket of hair and lint strainer needs cleaning
3. Low water level in pool

NOTE: If the recommendations in the trouble shooting portion of this manual do not solve your particular problem(s), please contact your local dealer for service.